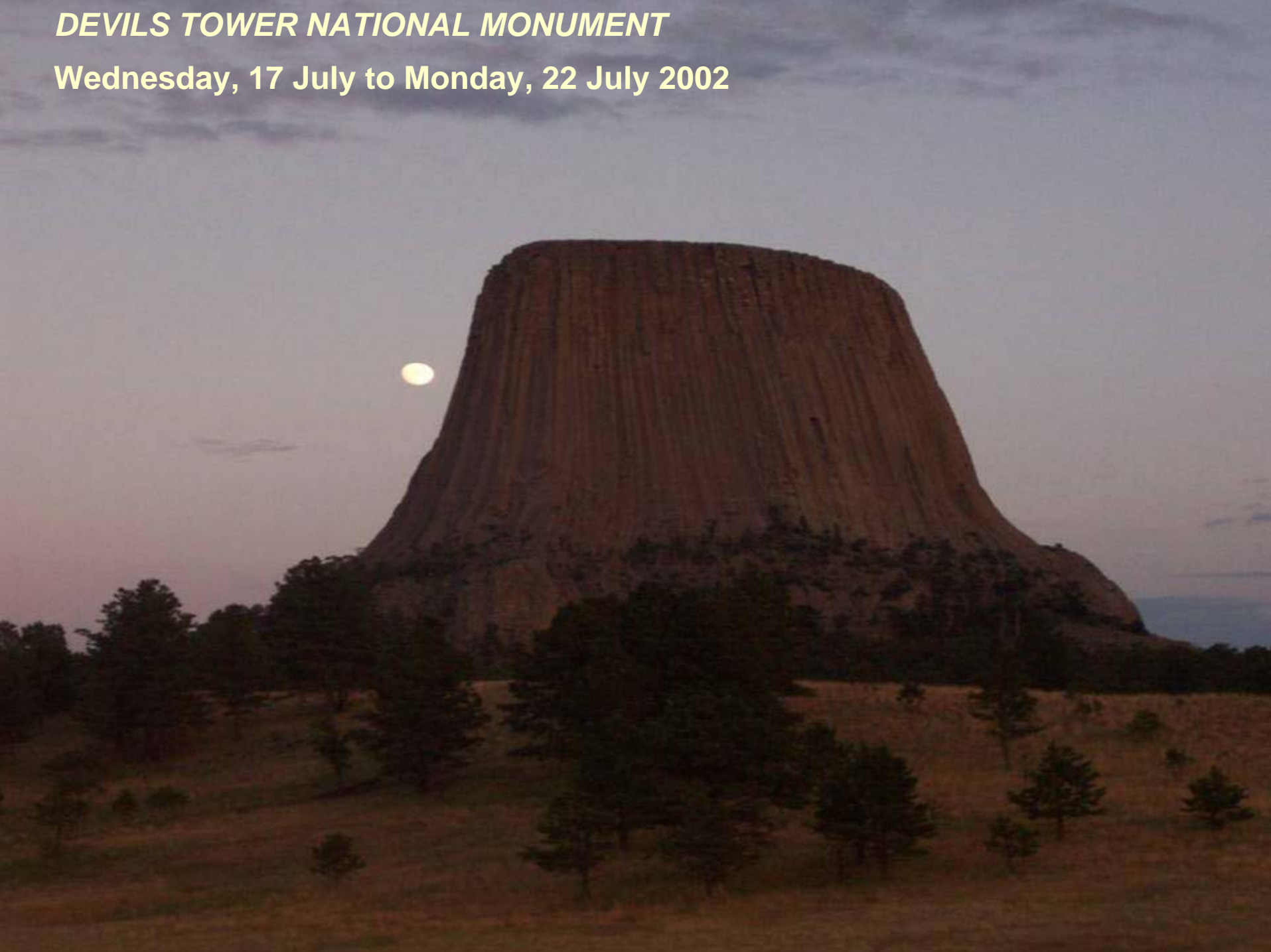


DEVILS TOWER NATIONAL MONUMENT

Wednesday, 17 July to Monday, 22 July 2002





3 Pitfall Stations in each habitat:

Ponderosa Pine

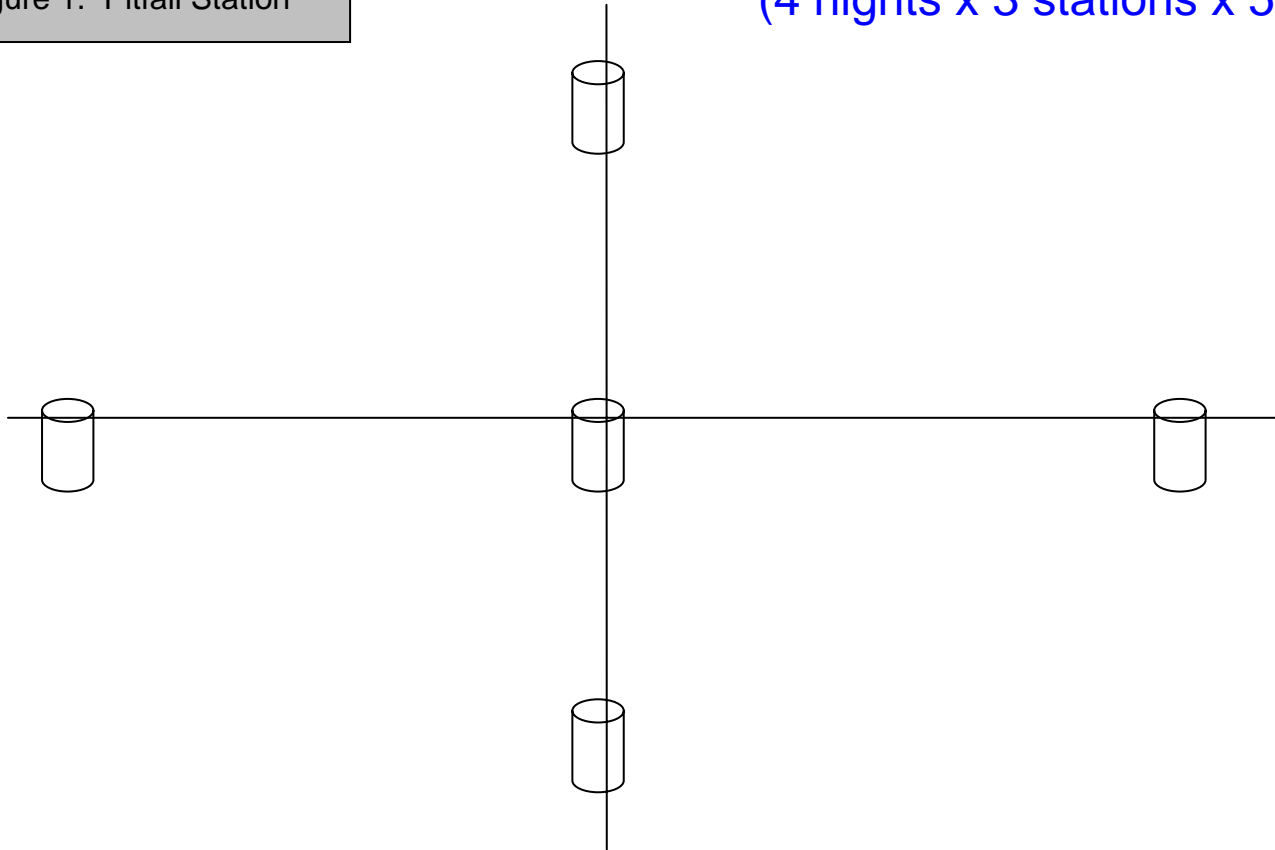
Grassland

Riparian

**Stations run for 4 nights for a total of 60 trap
nights per habitat**

(4 nights x 3 stations x 5 buckets/station)

Figure 1. Pitfall Station

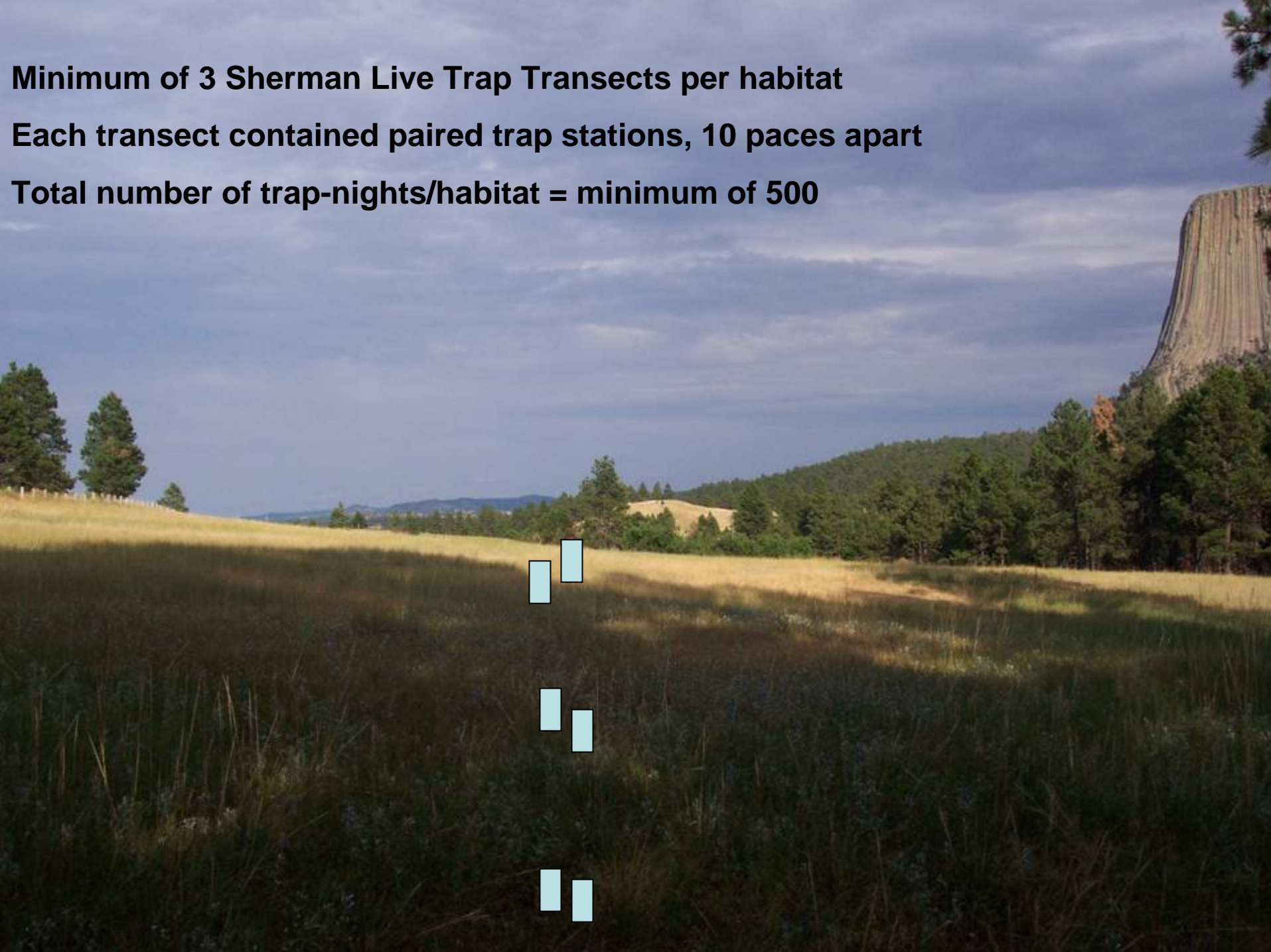




Minimum of 3 Sherman Live Trap Transects per habitat

Each transect contained paired trap stations, 10 paces apart

Total number of trap-nights/habitat = minimum of 500



DEVILS TOWER

Ponderosa Pine Shermans

White-footed mouse—12

Deer mouse—18

Bushy-tailed woodrat —12

Grassland Shermans

White-footed mouse—2

Deer mouse—20

Least chipmunk —1 (near campground)

Prairie vole—3

Western harvest mouse—1

Riparian Shermans

Thirteen-lined ground squirrel —5

White-footed mouse—8

Deer mouse—3

Prairie vole—1

Meadow vole—4

Prairie Dog Town Shermans

Deer mouse—3

Ponderosa Pine Pitfalls

Masked shrew* —1

Deer mouse—1

Grassland Pitfalls

Deer mouse—2

Tiger salamander—1

Plains spadefoot toad—1

Riparian Pitfalls

Meadow jumping mouse —2

Masked shrew* —5

White-footed mouse—2

Milksnake—1

Other Observations:

A skull of a **mink** was found in the sagebrush area in SW quadrant

A **bobcat** was observed along the Belle Fourche just south of the prairie dog town.

A **red squirrel** was photographed near the NPS apartment complex.

Nuttall's cottontail rabbits were observed at the NPS apartment complex and near the entrance to the park.

Mounds produced by **pocket gophers** (Northern or Plains) were observed throughout much of the park.

White-tailed deer were observed throughout the park.

Prairie dogs

DEVILS TOWER NM SUMMARY

24 Documented Species	11 confirmed
<u>25</u> Expected Species	<u>5</u> * confirmed (gopher species not delineated)
49 Species Total	16 confirmed (33%)

1 unexpected species: Meadow Jumping Mouse

Species still to be confirmed are

BATS (9 spp.)

CARNIVORES (7 spp)

RODENTS (13 spp)

RABBITS / HARES (2 spp)

UNGULATES (2 spp)

Mount Rushmore National Memorial

Monday, 29 July 2002 to Friday, 2 August 2002



MOUNT RUSHMORE NM

Mesic/Riparian Shermans

Least chipmunk – 4
White-footed mouse — 39
Deer Mouse—75
Red-backed vole – 9
Meadow vole – 4
Meadow Jumping Mouse – 2

Upland Pine Shermans

Masked shrew * – 2
Least chipmunk – 2
White-footed mouse —6
Deer mouse —6
Western harvest mouse -- 2

Mesic/Riparian Pitfalls

Masked shrew* —4
Western harvest mouse - 1
Red-backed vole – 2
Meadow vole -- 2

Upland Pine Pitfalls

Masked shrew* – 1
Red-backed vole -- 2

Other Observations:

White-tailed deer were observed north of the well pen

Beaver pond was observed in “Sterling” gulch

MOUNT RUSHMORE NM SUMMARY

1 Documented Species	1 confirmed
<u>42</u> Expected Species	<u>9</u> confirmed
43 Species Total	10 confirmed (23%)

1 unexpected species: Meadow jumping mouse

Species still to be confirmed are

SHREW (1 sp)

BATS (10 spp.)

CARNIVORES (9 spp)

RODENTS (11 spp)

RABBITS / HARES (2 spp)

UNGULATES (2 spp)



FORT UNION TRADING POST NHS
Monday, 5 August 2002 to Friday, 9 August 2002

FORT UNION TRADING POST NHS

Riparian Woodland Shermans

Short-tailed shrew – 4

Masked shrew* -- 5

White-footed mouse— 58

Deer mouse—88

Western harvest mouse – 5

Red-backed vole – 62

Meadow vole – 16

Mus musculus – 1

Grassland Shermans

Richardson's ground squirrel -- 2

Thirteen-lined ground squirrel – 23

Olive-backed pocket mouse – 1

White-footed mouse—4

Deer mouse—49

Grasshopper mouse -- 4

Western harvest mouse—2

Red-backed vole - 1

Meadow vole -- 4

Riparian Woodland Pitfalls

Masked shrew*—16

Short-tailed shrew -- 1

Deer mouse—2

Red-backed vole – 10

Meadow vole -- 11

House mouse – 2

Unidentified frog (voucher submitted) – 1

Plains Spadefoot Toad – 1

Western Chorus Frog – 1

Northern Leopard Frog – 1

Grassland Pitfalls

Masked shrew* – 4

Olive-backed pocket mouse -- 1

Deer mouse—2

Meadow vole -- 1

Northern Leopard Frog -- 1

Other Observations:

Porcupines were observed primarily west of the visitor's parking lot.

Pocket gopher mounds were observed throughout the grassland areas of the park.

Spadefoot toads were observed crossing the road from the parking lot to the Fort.

A Western Plains Garter Snake was photographed close to Riparian transect #2 (below visitor's parking lot in riparian woodland).

FORT UNION TRADING POST NHS SUMMARY

34 Documented Species	9 confirmed
<u>14</u> Expected Species	<u>2</u> confirmed (gopher species not delineated)
48 Species Total	11 confirmed (23%)

3 unexpected species: Meadow jumping mouse
Short-tailed shrew
Pocket gopher

Species still to be confirmed are
SHREW (1 sp)
BATS (9 spp.)
CARNIVORES (10 spp)
RODENTS (10 spp)
RABBITS / HARES (3 spp)
UNGULATES (4 spp)

A photograph of a riverbank. In the foreground, there is a dense field of tall, green grass with some golden-brown seed heads. To the left, a large, leafy green tree stands prominently. In the background, a river flows, and the opposite bank is visible with more trees and a clear blue sky.

KNIFE RIVER INDIAN VILLAGES NHS
Friday, 9 August, 2002 to Sunday 11 August 2002

KNIFE RIVER INDIAN VILLAGES NHS

Forested Floodplain Shermans

Short-tailed shrew -- 2

Masked shrew* -- 2

White-footed mouse— 79

Deer mouse—16

Red-backed vole – 22

Meadow vole – 1

Meadow jumping mouse – 6

Grassland Shermans

Thirteen-lined ground squirrel – 10

White-footed mouse— 8

Deer mouse—17

Meadow vole -- 1

KNIFE RIVER INDIAN VILLAGES NHS SUMMARY

25 Documented Species	7 confirmed
<u>17</u> Expected Species	<u>0</u> confirmed
42 Species Total	7 confirmed (17%)

1 unexpected species: Meadow jumping mouse

Species still to be confirmed are

BATS (8 spp.)

CARNIVORES (10 spp)

RODENTS (12 spp)

RABBITS / HARES (2 spp)

UNGULATES (3 spp)

SCOTTS BLUFF NATIONAL MONUMENT

Wednesday, 11 September to Sunday, 15 September 2002



SCOTTS BLUFF NATIONAL MONUMENT

Riparian Forest Shermans

Prairie vole – 5

Meadow vole – 3

Deer mouse—24

Western harvest mouse -- 3

Eastern Yellow-bellied Racer – 1

Grassland Shermans

Deer mouse—12

Western harvest mouse – 1

Prairie vole—2

Badlands Topography Shermans

Masked shrew* – 1

Deer mouse—33

Prairie vole—7

Meadow vole—6

House mouse -- 1

Riparian Forest Pitfalls

Masked shrew*--2

Microtus spp. – 1 (too wet to ID)

Western Chorus Frog -- 1

Grassland Pitfalls

Masked shrew*—1

Plains spadefoot toad —1

Other Observations:

Prairie dogs were observed in the prairie dog town off of Gering Canal Road.

A large **mule deer** buck was observed several mornings in the buckbrush north of the railroad tracks as we came through the culvert underpass.

Cottontail rabbits (*Sylvilagus* spp) were observed around the Visitor's Center and heard in brushy areas along the Gering Canal Road.

A **coyote** was observed south of the prairie dog town.

Three **pronghorn** were observed late on the evening of 11 September, and pronghorn scat was collected as verification.

Prairie rattlesnakes (*Crotalus viridis viridis*) were observed/photographed in riparian and badland areas south of the Gering Canal Road.

A young **bullsnake** (*Pituophis melanoleucus sayi*) was observed/photographed in the prairie dog town.

SCOTTS BLUFF NATIONAL MONUMENT SUMMARY

29 Documented Species	8 confirmed
<u>14</u> Expected Species	<u>1</u> confirmed
43 Species Total	9 confirmed (21%)

1 unexpected species: Pronghorn

Species still to be confirmed are

MOLE (1 spp)

BATS (6 spp.)

CARNIVORES (7 spp)

RODENTS (15 spp)

RABBITS / HARES (3 spp)

UNGULATES (1 spp)

AGATE FOSSIL BEDS NATIONAL MONUMENT

Monday, 16 September 2002 to Wednesday, 18 September 2002



AGATE FOSSIL BEDS

Riparian/Willow Shermans

Hispid pocket mouse -- 9

Prairie vole – 6

Western harvest mouse -- 4

White-footed mouse— 1

Deer mouse—46

Grassland Shermans

Hispid pocket mouse -- 3

Ord's kangaroo rat – 13

Grasshopper mouse -- 1

Silky pocket mouse – 1

Deer mouse—41

Thirteen-lined ground squirrel – 1

Other Observations:

Shed antlers of **mule deer** and **white-tailed deer** were observed.

Pocket gopher mounds were abundant and probably represent the plains **pocket gopher**.

A **coyote** was observed north of the river, across from Rd 308.

Cottontails were observed at a distance around the visitor's center.

A short-horned lizard was caught along GRA-1.

AGATE FOSSILS BEDS NATIONAL MONUMENT SUMMARY

31 Documented Species	12 confirmed
<u>12</u> Expected Species	<u>1</u> confirmed
43 Species Total	13 confirmed (30%)

Species still to be confirmed are

MOLE (1 spp)

SHREW (1 spp)

BATS (6 spp.)

CARNIVORES (6 spp)

RODENTS (12 spp)

RABBITS / HARES (3 spp)

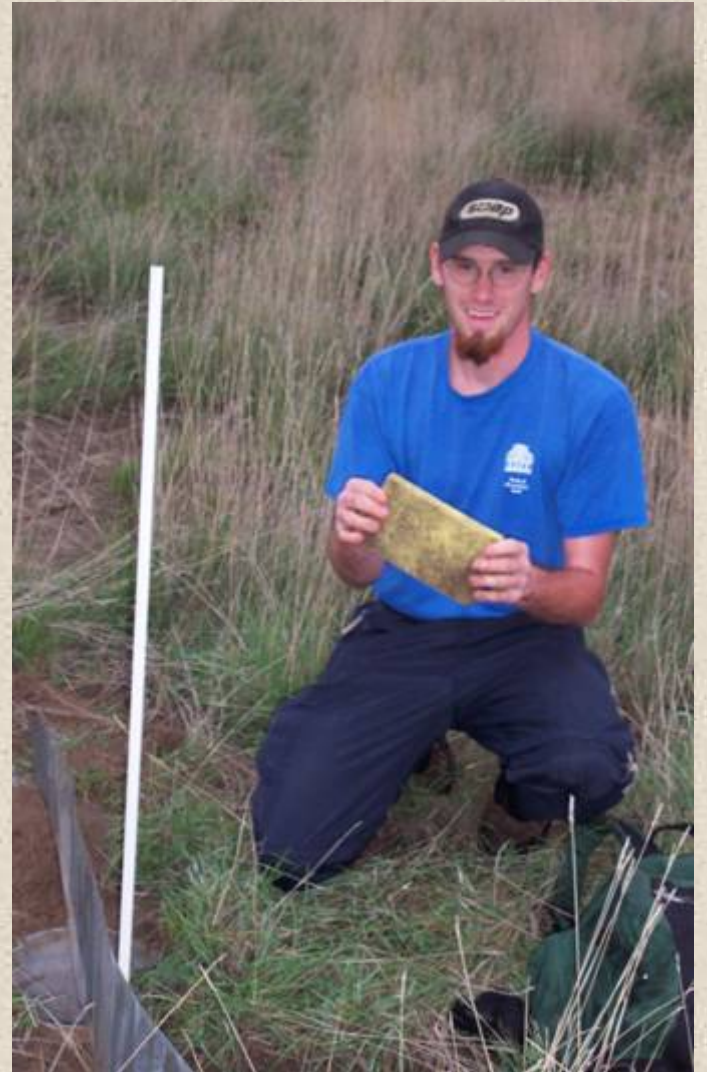
UNGULATES (1 spp)

2002 Field Assistants

Shauna Marquardt



Shaun Dunn



2003 FIELD SEASON

Ft. Laramie National Historic Site

- pitfall and Sherman trapping, bat work (netting and acoustic surveys),
- visual observations

Jewel Cave National Monument

- Sherman trapping; no pitfalls and no bat work

Agate Fossil Beds NM

Devils Tower NM

Fort Union Trading Post NHS

Knife River Indian Villages NHS

Mount Rushmore NMEM

Scotts Bluff NM



Bat work

Visual observations

“Other”

Wind Cave National Park -- bat work; research

2004 FIELD SEASON

Missouri National Recreational River

- all mammal surveys (pitfalls, Shermans, bat netting and acoustic, ...)